

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Michael E. Seitz et al. Art Unit 1609
Serial No. 10/728,654
Filed December 5, 2003
Confirmation No. 8454
For MICROCAPSULES WITH AMINE ADJUSTED RELEASE RATES
Examiner Barbara S. Frazier

January 9, 2008

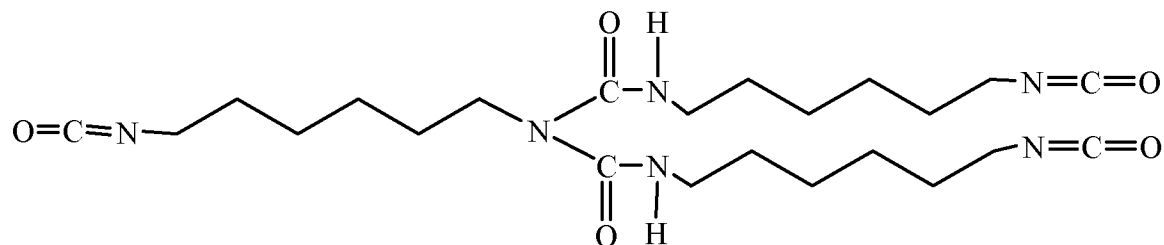
RESPONSE TO ELECTION OF SPECIES REQUIREMENT

TO THE COMMISSIONER FOR PATENTS,

SIR:

In response to the Office action mailed September 28, 2007,
Applicants elect the following species for examination:

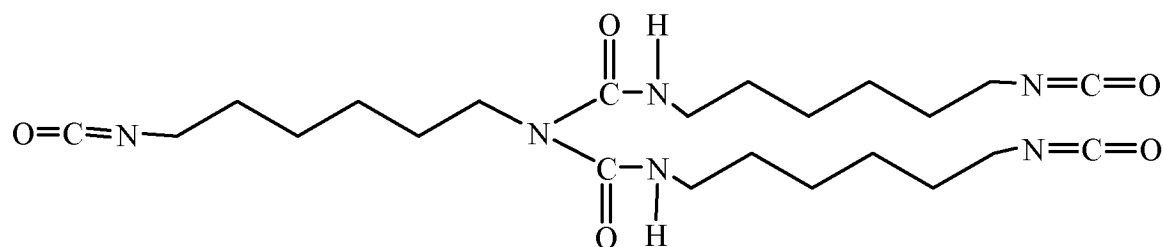
A pesticidal material comprising a substantially water-immiscible core material, the core material comprising alachlor and being encapsulated in a shell having a predetermined permeability with respect to the core material, wherein the shell is formed by an interfacial polymerization of a biuret-containing adduct of hexamethylene-1,6-diisocyanate of the following structure



with other monomers in an encapsulation shell-forming polymerization system, said other monomers comprising triethylenetetramine and polyoxypropylenetriamine.

In this elected species,

A) biuret-containing adduct of hexamethylene-1,6-diisocyanate of the following structure



is the elected polyisocyanate species;

B) triethylenetetramine is the elected principal amine species;

C) polyoxypropylenetriamine is the elected auxiliary amine species; and

D) alachlor is the elected pesticide species.

Claims 1, 2, 4, 5, 9-12, 17-20, 22-25, 32, 33, 35, 36, 40-43, 48-51 and 53-56 read on the elected species.

Claim 3 and claim 34 read on the elected species when said other monomers comprise triethylenetetramine and polyoxypropylenetriamine in a ratio effective to provide a predetermined permeability of the shell.

Claim 21 and claim 52 read on the elected species when the shell is substantially non-porous.

Claim 26 and claim 57 read on the elected species when the pesticide further comprises a safener.

Claim 27 and claim 58 read on the elected species when the core material further comprises a diluent.

Claim 28 and claim 59 read on the elected species when the core material further comprises a diluent which is selected such that the core material has a Hildebrand solubility parameter

which is greater than a Hildebrand solubility parameter of an otherwise identical core material which is substantially free of the diluent.

Claim 29 and claim 60 read on the elected species when the core material further comprises a diluent which is selected such that the core material has a Hildebrand solubility parameter which is less than a Hildebrand solubility parameter of an otherwise identical core material which is substantially free of the diluent.

Claim 30 and claim 61 read on the elected species when the ratio of the weight of the shell to the weight of the core material is less than about 33%.

Claim 31 and claim 62 read on the elected species when the microcapsule has a mass to volume ratio between about 1.1 g/cm^3 and about 1.5 g/cm^3 .

Claim 63 reads on the elected species when the dispersion has a viscosity of from about 100 centipoise to about 300 centipoise.

Claim 64 reads on the elected species when the microcapsules have a volume-weighted median diameter between about 2 microns and about 8 microns wherein the volume-weighted median diameter is reported by a particle size analyzer based on particle light diffraction of laser light having about a 750 nm wavelength.

Claim 65 reads on the elected species when the microcapsules have a volumetric diameter distribution such that at least about 90% of the microcapsules on a volumetric basis have a diameter of less than about 60 microns, wherein the volumetric diameter distribution is reported by a particle size analyzer based on particle light diffraction of laser light having about a 750 nm wavelength.

Claim 66 reads on the elected species when the agricultural formulation comprises less than about 65 weight percent microcapsules.

Claim 67 reads on the elected species when the agricultural formulation further comprises an additive selected from the group consisting of a thickener, a dispersant, an antifreeze agent, a preservative, an aqueous phase density increaser, a pH buffer, an anti-packing agent, and an anti-foam agent.

Claim 68 reads on the elected species when the microcapsules have a weight average mass to volume ratio within about 0.2 g/cm^3 of the aqueous phase density.

Claim 69 reads on the elected species when the agricultural formulation is applied to an agricultural field.

Applicants reserve the right to file one or more divisional applications directed to the subject matter of the non-elected species.

The Commissioner is hereby authorized to charge any government fees which may be required including a three month extension of time to Deposit Account No. 19-1345.

Respectfully submitted,

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